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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,926	07/15/2003	Adrianus Johannes Heinen	USP169781A	6818
7590	12/19/2005		EXAMINER	
Daniel H. Golub 1701 Market Street Philadelphia, PA 19103			AVERY, BRIDGET D	
			ART UNIT	PAPER NUMBER
			3618	
DATE MAILED: 12/19/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/619,926

Applicant(s)

HEINEN, ADRIANUS JOHANNES

Examiner

Bridget Avery

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4,6-14 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-14 and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4, 6-14 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hewko (US Patent 5,087,229).

Hewko teaches a traction assembly including a wheel having a rotational axis and a tire (64), a first radius extending around the rotational axis to an exterior surface of the wheel (10), the exterior surface of the wheel engages a static, non-rotation surface while the traction assembly is in operation; an electric motor including a rotor, a stator core (80) and a stator winding (82) situated inside the wheel; a gap situated around the rotational axis between the rotor (58) and the stator (80), as clearly shown in Figure 1; the electric motor exerts torque that drives the wheel; the torque having an arm extending from the rotational axis to a surface of the gap; and the traction assembly has a traction ratio, defined as the arm of the torque divided by the first radius of the wheel. Re claim 6, see permanent magnets (132). Re claim 8, see operating and control means, as stated in column 2, lines 31-34. Re claims 9-14, see central shaft (108) and Figure 3.

Hewko lacks the exact teaching of a traction ratio which is larger than 0.57, 0.65, 0.7, and smaller than 1.0.

However, it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide a traction ratio that is larger than 0.57, 0.65, 0.7, and smaller than 1.0 since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

2. Claims 1-4, 6-14 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima (US Patent 4,799,564) in view of Hewko ('229).

Iijima et al. teaches a traction assembly including a wheel having a rotational axis, a first radius extending around the rotational axis to an exterior surface of the wheel (428), the exterior surface of the wheel engages a static, non-rotation surface while the traction assembly is in operation; an electric motor (403) including a rotor and a stator; a gap (a) situated around the rotational axis between the rotor (408) and the stator (404); the electric motor (403) exerts torque that drives the wheel; the torque having an arm extending from the rotational axis to a surface of the gap (a); and the traction assembly has a traction ratio, defined as the arm of the torque divided by the first radius of the wheel. Re claim 6, see the permanent magnets clearly shown in Figures 16 and 19. Re claims 9-14, note output shaft (409) as shown in Figures 16 and 19.

Iijima lacks the teaching of a control unit and a traction ratio that is larger than 0.57, 0.65, 0.7, and smaller than 1.0.

Hewko teaches a central control unit.

Based on the teachings of Hewko, it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to add a central control unit to the wheel of Iijima to energize the stator windings with current to produce a rotating magnetic field between the permanent magnets and the poles of the stator.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide a traction ratio that is larger than 0.57, 0.65, 0.7, and smaller than 1.0 since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-4 and 6-14 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

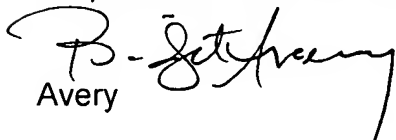
Art Unit: 3618

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

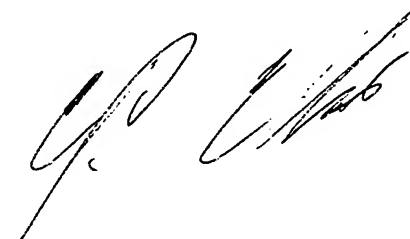
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Strothmann shows an electric auxiliary drive for a traveling device.

6. Any inquiry concerning this communication should be directed to Bridget Avery at telephone number 571-272-6691.

  
Avery

December 12, 2005



CHRISTOPHER P. ELLIS  
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